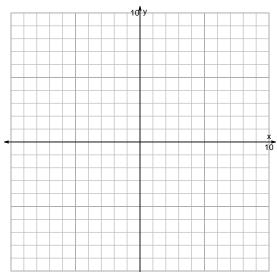
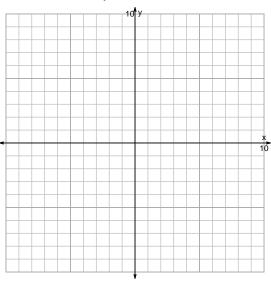
## s18quiz: EXP LOG (Practice v114)

1. Graph  $y = \log_2(x+5) - 4$  and  $y = 2^{x+4} - 6$  on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x+5) - 4$$



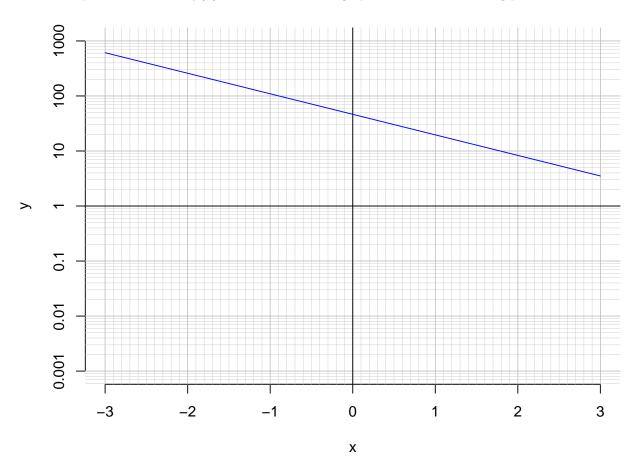
$$y = 2^{x+4} - 6$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$23 = \left(\frac{4}{5}\right) \cdot 2^{3t/7}$$

3. An exponential function  $f(x) = 46.4 \cdot e^{-0.859x}$  is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.2).

- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(60)$ .